

AMENDMENTS TO THE SPECIFICATION

IN THE SPECIFICATION:

Page 2, before the title "DETAILED DESCRIPTION OF EMBODIMENTS", please insert the following:

BRIEF DESCRIPTION OF DRAWINGS

FIG. 1 illustrates the addition of pixels to a defined region.

Page 8, please amend the fourth paragraph as follows:

Firstly, as illustrated in FIG. 1 a selected pixel X is included into the region R (A pixel is selected). Then, the pairs of pixels  $Y = X - v$ ,  $Z = X + v$ , where  $v$  is a shift vector, symmetrical with respect to point X and touching the already filled part of the region R, are considered pair by pair and a check is made whether the squared difference of their half sum  $p(v) = (p(Y) + p(Z))/2$  squared difference of their half sum  $p(v) = (p(Y) + p(Z))/2$  from the average value of the pixels already included into R does not exceed the dispersion D of the noise present in the mentioned difference multiplied by some tolerance level L set by the user. If the pair of pixels passes the test, it is included into R (a first pair of pixels are added to the region). As long as the region R grows, the process continues with considering of pairs as described above (a second pair of pixels are added to the region). The process is stopped when no new pair of pixels passes the tests (the last pair of pixels are

added to the region). Then the average pixel value over R is used as a value of pixel X in an image with reduced noise.